

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,669	11/28/2005	Matan Arazi	06727/1200442-US1	4972
7278 7590 10/17/2007 DARBY & DARBY P.C. P.O. BOX 770			EXAMINER	
			VIZVARY, GERALD C	
Church Street Station New York, NY 10008-0770			ART UNIT	PAPER NUMBER
			4132	
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			MAIL DATE	DELIVERY MODE
		·	10/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/510,669	ARAZI ET AL.	
Office Action Summary	Examiner	Art Unit	
	Gerald C. Vizvary	4132	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet wit	h the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING DESTATE SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC 136(a). In no event, however, may a re will apply and will expire SIX (6) MONT te, cause the application to become ABA	ATION.  ply be timely filed  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on      This action is FINAL. 2b)⊠ Thi      Since this application is in condition for allowed closed in accordance with the practice under	s action is non-final. ance except for formal matte		
Disposition of Claims		•	
4) ⊠ Claim(s) <u>1-26</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-26</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	awn from consideration.		
Application Papers		·	
9) The specification is objected to by the Examina 10) The drawing(s) filed on is/are: a) accomposite and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examina 10.	cepted or b) objected to be drawing(s) be held in abeyand ction is required if the drawing(s	ce. See 37 CFR 1.85(a).  s) is objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat* See the attached detailed Office action for a list	ts have been received. ts have been received in Ap prity documents have been r au (PCT Rule 17.2(a)).	plication No. <u>10/510669</u> . eceived in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 2/11/2005		/Mail Dateormal Patent Application	

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## **DETAILED ACTION**

## Information Disclosure Statement

 The information disclosure statement (IDS) submitted on 2/11/2005 was considered by the examiner.

## Claim Rejections - 35 USC § 102

- The following is a quotation of the appropriate paragraphs of 35
   U.S.C. 102 that form the basis for the rejections under this section made in this
   Office action:
  - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-26 are rejected under 35 USC 102(e) as being unpatentable under Lewis Pub. No. US 2002/0065752 A1

As for claim 1 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system comprising:

a price information cache including a multiplicity of price information items originating from more than one transaction queries posed by more than one trader from among a population of traders, each of said price information items

having a cached life cycle ("Vendor data elements are translated to a format applicable to the corresponding fields in the database, e.g., "maturity date" is translated into one of a series of "principal events" in the life cycle of the financial instrument. Once finalized, the processed data is stored in the database, making it available to feed the Distribution Process." Lewis Pub. No. US 2002/0065752 A1 ¶ [0124]); and

a trading query processor operative to receive trading queries from said population of traders and to employ said price information cache in responding thereto ("The invention includes plural servers, each of which is called upon to perform functionality relevant to a particular input message, inquiry or report request, alert situation, or other subset of financial data processing." Lewis Pub. No. US 2002/0065752 A1 ¶ [0104])

As for claim 2 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system according to claim 1 and wherein said trading query processor is operative to send subqueries which relate to price information items not available in the price information cache ("The system architecture permits simultaneous interoperation with other vendor software products and proprietary software applications, spanning simple query tools to sophisticated financial analytical applications." Lewis Pub. No. US 2002/0065752 A1 ¶ [0071])

As for claim 3 Lewis Pub. No. US 2002/0065752 A1 shows a computerized

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trading system according to claim 1 wherein said cached life cycle includes an indication of time-points defining at least one time periods ("This engine enables the user to enter historical queries and reports as of a specific data and time or across a historical period. An example would be a query requesting the consolidation of settled and pending positions, balances, and transactions from multiple accounts for the same customer, counterparty, or trader as of December 31 of the previous three years. The time series engine deployed by and integrated into the invention is supplied by a third party software company." Lewis Pub. No. US 2002/0065752 A1 ¶ [0150])

As for claim 4 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system according to claim 3 wherein said cached life cycle includes an indication of time-points defining a plurality of time periods ("The Construction Process applies business rules for translating the validated data into field entries in the database. Vendor data elements are translated to a format applicable to the corresponding fields in the database, e.g., "maturity date" is translated into one of a series of "principal events" in the life cycle of the financial instrument. Once finalized, the processed data is stored in the database, making it available to feed the Distribution Process." Lewis Pub. No. US 2002/0065752 A1 ¶ [0124])

As for claim 5 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system comprising:

a price information cache including a multiplicity of price information items originating from more than one transaction queries posed by more than one trader from among a population of traders ("The Market Data Information Server concurrently processes market data, such as prices, indicative data (full financial description of a security), and corporate action announcements. It processes this data for virtually all types of securities, commodities, loans, and other financial instruments, denominated in any currency and described in any language." Lewis Pub. No. US 2002/0065752 A1 ¶ [0117]); and

a trading query processor operative to receive trading queries from said population of traders and to process said trading queries not necessarily in FIFO order in order to enhance the efficiency of responding thereto ("In this depiction, three different types of financial instruments are transacted, block 10, as recorded in transaction data records 20 being aggregated on reports 30 within each of three separate regions (e.g., Tokyo) 40. For each type of financial instrument (e.g., equities, fixed income, options), in each region, a similar path will exist, but the timing of the processing, and the information created on the reports will be substantially different." Lewis Pub. No. US 2002/0065752 A1 ¶ [0017])

As for claim 6 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system according to claim 5 wherein similar trading queries are grouped

together ("For each type of financial instrument (e.g., equities, fixed income, options), in each region, a similar path will exist, but the timing of the processing, and the information created on the reports will be substantially different." Lewis Pub. No. US 2002/0065752 A1 ¶ [0017])

As for claim 7 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system according to claim 5 wherein said trading queries include at least one query to a human-operated workstation ("It is yet another object of the present invention to provide client workstations that include thin client access to a remote database employing technologies such as HTML, DHTML, Java, and other Web-enabled user interface technologies." Lewis Pub. No. US 2002/0065752 A1 ¶ [0031])

As for claim 8 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system according to claim 5 wherein said trading queries include at least one query to an automatic computer-based information provider. ("The invention includes plural servers, each of which is called upon to perform functionality relevant to a particular input message, inquiry or report request, alert situation, or other subset of financial data processing." Lewis Pub. No. US 2002/0065752 A1 ¶ [0036])

As for claim 9 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system comprising: a shared price information cache subsystem including

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a multiplicity of price information items originating from more than one transaction queries posed by more than one trader from among a population of competing traders ("As discussed above, data is first acquired ("Acquisition Process"), and then translated to a common format. This involves sorting and re-sequencing the incoming data transmissions from numerous data vendors, such as Bloomberg®, Reuters®, and the like, as well as collecting data from users that enter data into thin client, browser-based screens, formatting the data into messages, and storing the data in both its original and reformatted formats. For vendor-supplied data the system confirms timely receipt of the data (e.g., provided in accord with scheduled delivery), and confirms that the data complies with that expected from that vendor in terms of completeness and form. Finally, the data is prepared for input to the Validation Process." Lewis Pub. No. US 2002/0065752 A1 ¶ [0122]); and

a shared price information updating subsystem operative to update said shared price information cache subsystem based on information received in the context of a query and similarities between that query and other queries ("It is still another object of the present invention to provide a generated, object-oriented computer system (e.g., a set of generated instantiations of C++ and/or Java object classes) that updates a database that is structured according to a data model that relates data and information pertaining to financial transactions (settled and forecast), financial instruments, customers, counterparties, employees, organizational units, and financial institutions, and that simplifies roll-

up and drill-down between hierarchical levels of aggregated information and the lowest level of data details, as well as simplifies access to user-defined, recursive groupings of data and information." Lewis Pub. No. US 2002/0065752 A1 ¶ [0027])

As for claim 10 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system comprising:

a price information cache including a multiplicity of price information items originating from more than one transaction queries posed by more than one trader from among a population of traders ("As discussed above, data is first acquired ("Acquisition Process"), and then translated to a common format. This involves sorting and re-sequencing the incoming data transmissions from numerous data vendors, such as Bloomberg®, Reuters®, and the like, as well as collecting data from users that enter data into thin client, browser-based screens, formatting the data into messages, and storing the data in both its original and reformatted formats. For vendor-supplied data the system confirms timely receipt of the data (e.g., provided in accord with scheduled delivery), and confirms that the data complies with that expected from that vendor in terms of completeness and form. Finally, the data is prepared for input to the Validation Process." Lewis Pub. No. US 2002/0065752 A1 ¶ [0122]); and

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a trading query processor operative to receive trading queries from said population of traders and to employ said price information cache in responding thereto, said trading query processor employing inquiry templates built on earlier inquiries and information received in response thereto ("Customer/Counterparty Information Server that processes messages that contain data records from multiple disparate sources that describe, and record standing processing instructions for, customers and counterparties and derives a composite of each customer, counterparty, and financial institution" Lewis Pub. No. US 2002/0065752 A1 ¶ [0036])

(The present invention is directed to an integrated computer system that consolidates data, derives information from this data, structures the data and information in a database that enables near real time information access, and distributes the data and information to users and software applications. Incoming data messages are read, parsed, and conformed to a standard structure. Three fundamental categories of messages are recognized, messages containing: financial transactions, market data updates, and customer/counterparty data updates. As the incoming data messages arrive, either in individual real-time messages or batch files of messages, they are converted into a format that is recognized by the information server that will process it. Lewis Pub. No. US 2002/0065752 A1 ¶ [0067])

As for claim 11 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system according to claim 10 and wherein the templates are selected

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based on similarities between inquiry templates built on earlier inquiries and a current inquiry ("Turning now to FIG. 19, an exemplary business rule set is presented. In this example, the system applies Rule (I) taken from the stored rule database or object cache, which is directed to processing "buy-execution" transactions. There is a select set of business rules for a "buy" of a security on the execution event; another set of business rules for the "buy" of the security on the actual settlement event; and so forth. Each transaction-event combination has a set of business rules associated with it." Lewis Pub. No. US 2002/0065752 A1 ¶ [0104])

As for claim 12 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system according to claim 11 wherein templates are displayed in an order depending on extent of similarity to a current inquiry ("It is still another object of the present invention to provide a generated, object-oriented computer system (e.g., a set of generated instantiations of C++ and/or Java object classes) that updates a database that is structured according to a data model that relates data and information pertaining to financial transactions (settled and forecast), financial instruments, customers, counterparties, employees, organizational units, and financial institutions, and that simplifies roll-up and drill-down between hierarchical levels of aggregated information and the lowest level of data details, as well as simplifies access to user-defined, recursive groupings of data and information." Lewis Pub. No. US 2002/0065752 A1 ¶ [0027])

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As for claim 13 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system according to claim 10 wherein said trading query processor is operative to identify in said inquiry templates built on earlier inquiries, information irrelevant to the current inquiry, to generate a reproduction of the inquiry template and to delete therefrom said information ("These business rules permit dynamic instruction of server-based components that contain multi-currency, multi-product, and multi-entity bookkeeping logic; market data cleansing, consolidation and distribution logic; and user/customer/counterparty data collection logic. By manipulating the business rules, the user can tailored the processing performed by, and the information created and stored by the system, as desired by different customer or user segments." Lewis Pub. No. US 2002/0065752 A1 ¶ [0033])

As for claim 14 Lewis Pub. No. US 2002/0065752 A1 shows a computerized transaction analysis method comprising:

accessing at least one relevant previous transaction, wherein relevance is a function of at least one user-defined parameter defining a proposed transaction; analyzing at least one parameter of the at least one relevant previous transaction, said at least one parameter being selected to match the at least one user-defined parameter ("The Validation Process applies quality assurance rules, pre-defined by the user, to the incoming data. The data is compared against pre-

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existing records to discern any discrepancies, and to test for changes in excess of acceptable tolerances." Lewis Pub. No. US 2002/0065752 A1 ¶ [0123]); and

generating at least one recommendations for the proposed transaction including an evaluation of the suitability of each of the at least one recommendations in view of at least one user-defined parameter ("After processing the message according to the business rules, the Market Data Information Server stores the input and results in the database, 130 FIG. 4, identifying the external (e.g., Reuters) or internal (e.g., trading department) source of each data value." Lewis Pub. No. US 2002/0065752 A1 ¶ [0120])

As for claim 15 Lewis Pub. No. US 2002/0065752 A1 shows a computerized transaction analysis method according to claim 14 wherein said step of generating comprises generating at least one recommendation by combining a plurality of relevant previous transactions ("These examples are merely illustrative of the ongoing need by almost every customer and functional group within the firm for current and projected transaction, position, balance, and market information that is continuously consolidated by customer, counterparty, currency, financial instrument, and other criteria. To accomplish this for a large and growing audience of simultaneous users requires that the information must be standardized; edited and enriched; aggregated and consolidated; integrated and structured; and stored into and distributed from; a widely accessible and

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sharable, and individually useful database that is continuously updated on a real-time, or near real-time basis." Lewis Pub. No. US 2002/0065752 A1 ¶ [0015])

As for claim 16 Lewis Pub. No. US 2002/0065752 A1 shows a computerized transaction analysis method according to claim 14 wherein said step of generating comprises adjusting for at least one parameter external to all relevant previous transactions under consideration ("It is still another object of the present invention to provide a workstation that allows users to enter and modify business rules that are recorded in database tables and that designate the specific information that is to be derived from each type of incoming transaction, market data record, or customer/counterparty update record; thus allowing more and different information to be created and stored in the database without requiring revision to the production code." Lewis Pub. No. US 2002/0065752 A1 ¶ [0033])

As for claim 17 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system according to claim 1 wherein at least one cached life cycle includes:

a cached time period in which an associated price information item is valid; a cached time period in which an associated price information is invalid; and a cached time period in which an associated price information may be valid and may not be valid ("The Construction Process applies business rules for translating the validated data into field entries in the database. Vendor data elements are translated to a format applicable to the corresponding fields in the

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database, e.g., "maturity date" is translated into one of a series of "principal events" in the life cycle of the financial instrument. Once finalized, the processed data is stored in the database, making it available to feed the Distribution

Process." Lewis Pub. No. US 2002/0065752 A1 ¶ [0033])

As for claim 18 Lewis Pub. No. US 2002/0065752 A1 shows a computerized

trading system comprising:

a price information cache including a multiplicity of price information items originating from more than one transaction queries posed by more than one trader from among a population of traders, each of said price information items having a cached life cycle ("Web Server objects update and retrieve from the database; construct and place messages on the Message Bus that are addressed to the Controller, 105 FIG. 4; perform select financial calculations and data manipulation, and retains results of these calculations and data manipulation in persistent object cache; manage and load balance a pool of connections with the database; route alerts to the designated user; enforce access security; and the like.." Lewis Pub. No. US 2002/0065752 A1 ¶ [0147]); and

a trading query processor operative to receive trading queries from the population of traders including accessing the price information cache to respond as fully as possible to each trading query and sending out sub queries which

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relate to price information items not present in the price information cache ("The Web Server also contains application functionality related to the Accounting Information Server, Market Data Information Server, and Customer/Counterparty Information Server. This application functionality helps to distribute the workload as well as "filtering" processing from the generic to the specific." Lewis Pub. No. US 2002/0065752 A1 ¶ [0147])

As for claim 19 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading system comprising:

a price information cache including a multiplicity of price information items originating from more than one transaction queries posed by more than one trader from among a population of traders; and a trading query processor operative to receive a sequence of trading queries from said population of traders and to amalgamate at least one pair of queries from among said sequence of trading queries in order to enhance the efficiency of responding thereto ("The above and other objects of the present invention are realized in an integrated set of object-oriented (e.g., C++, Java, and the like) software components that are configured as a distributed processing network and as such constitute a computer system that receives input records that contain the data elements that comprise or describe financial transactions (settled and pending), financial instruments, customers, counterparties, employees, organizational units, and financial institutions, derives information from such data elements by coordinating its aggregation, calculation, and consolidation, interrelates the data and

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information when storing it in a database that is designed for organizing, storing, and retrieving such data and information, and proactively distributes the data and information according to pre-defined instructions (e.g., alert users that a transaction has caused a negative cash balance to occur that is below a pre-defined minimum amount, and alert users again if the cash shortage has not been covered within a pre-defined time allowance)." Lewis Pub. No. US 2002/0065752 A1 ¶ [0035])

As for claim 20 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading method comprising:

providing a price information cache including a multiplicity of price information items originating from more than one transaction queries posed by more than one trader from among a population of traders, each of said price information items having a cached life cycle;

receiving trading queries from said population of traders;

and employing said price information cache in responding to said trading queries received ("The database makes both the data and the information available for simultaneous access by--and proactive electronic distribution to - the numerous customers, employees, and counterparties of the organization according to select and individualized inquiry and publish criteria. Importantly, the system is designed so that inputs can be received from a myriad of different transaction origination and settlement systems, market data vendor systems, and

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customer/counterparty systems, each having its own disparate data record formats." Lewis Pub. No. US 2002/0065752 A1 ¶ [0035])

As for claim 21 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading method comprising:

providing a price information cache including a multiplicity of price information items originating from more than one transaction queries posed by more than one trader from among a population of traders;

receiving trading queries from said population of traders; and

processing said trading queries received not necessarily in FIFO order in order to enhance the efficiency of responding thereto ("The Accounting Information Server processes incoming messages that contain transaction data and post results in financial terms (cash, fees, shares, interests, and the like). Thus, these incoming transactions are aggregated and netted in real time to specific ledger entries. The aggregation and netting is performed by the Accounting Information Server according to business rules that instruct the Accounting Information Server how to apply the incoming transactions to account balances, exposures, and other second order assessments (i.e., information)." Lewis Pub. No. US 2002/0065752 A1 ¶ [0070])

As for claim 22 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading method comprising:

providing a shared price information cache subsystem including a multiplicity of price information items originating from more than one transaction queries posed by more than one trader from among a population of competing traders ("The present invention is directed to an integrated computer system that consolidates data, derives information from this data, structures the data and information in a database that enables near real time information access, and distributes the data and information to users and software applications. Incoming data messages are read, parsed, and conformed to a standard structure. Three fundamental categories of messages are recognized, messages containing: financial transactions, market data updates, and customer/counterparty data updates. As the incoming data messages arrive, either in individual real-time messages or batch files of messages, they are converted into a format that is recognized by the information server that will process it. Lewis Pub. No. US 2002/0065752 A1 ¶ [0067]); and updating said shared price information cache subsystem based on information received in the context of a query and similarities between that query and other

As for claim 23 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading method comprising:

queries ("The principal group of components that update the database are the

information servers, 110." Lewis Pub. No. US 2002/0065752 A1 ¶ [0075])

providing a price information cache including a multiplicity of price information items originating from more than one transaction queries posed by more than

one trader from among a population of traders ("The Accounting Information Server processes incoming messages that contain transaction data and post results in financial terms (cash, fees, shares, interests, and the like)."Lewis Pub. No. US 2002/0065752 A1 ¶ [0070]);

receiving trading queries from said population of traders ("It is another object of the present invention to provide a computer system that receives incoming stochastic data records from plural disparate systems and data sources relating to financial transactions, financial instruments, customers, counterparties, employees, organizational units, and financial institutions." Lewis Pub. No. US 2002/0065752 A1 ¶ [0023]);

employing said price information cache in responding to said trading queries received ("It is yet another object of the present invention to proactively alert users and other applications when a situation occurs that warrants immediate attention. For example, alert the appropriate users and applications that as the result of a transaction, market change, or customer/counterparty change, a financial threshold or limit has been breached." Lewis Pub. No. US 2002/0065752 A1 ¶ [0030]); and

employing inquiry templates built on earlier inquiries and information received in response to said trading queries received ("The Validation Process ensures the accuracy of the data and prevents duplicative entries. The Validation Process

applies quality assurance rules, pre-defined by the user, to the incoming data. The data is compared against pre-existing records to discern any discrepancies, and to test for changes in excess of acceptable tolerances." Lewis Pub. No. US 2002/0065752 A1 ¶ [0123])

As for claim 24 Lewis Pub. No. US 2002/0065752 A1 shows a computerized transaction analysis system comprising:

a processor operative to access at least one relevant previous transaction, wherein relevance is a function of at least one user-defined parameter defining a proposed transaction; and a transaction analyzer operative to analyze at least one parameter of the at least one relevant previous transaction, said at least one parameter being selected to match the at least one user defined parameter and to generate at least one recommendations for the proposed transaction including an evaluation of the suitability of each of the at least one recommendations in view of at least one user-defined parameter. ("The Market Data Information Server processes the message by applying business rules that instruct it as to how the user wants it to do such things as prioritize or merge data that is received from multiple sources for the same instrument; send an alert to a price research analyst when a price change tolerance limit has is exceeded; and other quality assurance functions. After processing the message according to the business rules, the Market Data Information Server stores the input and results in the database, 130 FIG. 4, identifying the external (e.g., Reuters) or internal (e.g.,

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trading department) source of each data value." Lewis Pub. No. US

2002/0065752 A1 ¶ [0120])

As for claim 25 Lewis Pub. No. US 2002/0065752 A1 shows a computerized

trading method comprising:

providing a price information cache including a multiplicity of price information

items originating from more than one transaction queries posed by more than

one trader from among a population of traders, each of said price information

items having a cached life cycle ("Vendor data elements are translated to a

format applicable to the corresponding fields in the database, e.g., "maturity

date" is translated into one of a series of "principal events" in the life cycle of the

financial instrument. Once finalized, the processed data is stored in the

database, making it available to feed the Distribution Process." Lewis Pub. No.

US 2002/0065752 A1 ¶ [0124]);

receiving trading queries from the population of traders ("The system architecture

permits simultaneous interoperation with other vendor software products and

proprietary software applications, spanning simple query tools to sophisticated

financial analytical applications." Lewis Pub. No. US 2002/0065752 A1 ¶ [0071]);

accessing the price information cache to respond as fully as possible to each

trading query ("Consolidation is the process of 1) grouping Accounts for access

and aggregation by criteria such as customer, counterparty, trader, investment manager, book, desk, legal entity, location, and the like; 2) creating a composite of market data that pertains to each financial instrument from data that originates from multiple sources (e.g. identifiers, prices, indicative data, and corporate action announcements for the same financial instrument are received from separate sources and are consolidated into a composite) Lewis Pub. No. US 2002/0065752 A1 ¶ [0008]); and

sending out subqueries, which relate to price information items not present in the price information cache ("Invoke third-party query reporting, OLAP tools and the like to formulate ad hoc queries and reports against database." Lewis Pub. No. US 2002/0065752 A1 ¶ [0153])

As for claim 26 Lewis Pub. No. US 2002/0065752 A1 shows a computerized trading method comprising:

providing a price information cache including a multiplicity of price information items originating from more than one transaction queries posed by more than one trader from among a population of traders ("It is yet another object of the present invention to provide a system that consolidates both the incoming data, and the information that the system derives from such incoming data, in a well-defined database that supports multi-report generation in essentially real-time by a wide range of users making use of a wide range of programming languages

and higher-level information reporting tools." Lewis Pub. No. US 2002/0065752 A1 ¶ [0024]);

receiving a sequence of trading queries from said population of traders ("The above and other objects of the present invention are realized in an integrated set of object-oriented (e.g., C++, Java, and the like) software components that are configured as a distributed processing network and as such constitute a computer system that receives input records that contain the data elements that comprise or describe financial transactions (settled and pending), financial instruments, customers, counterparties, employees, organizational units, and financial institutions, derives information from such data elements by coordinating its aggregation, calculation, and consolidation, interrelates the data and information when storing it in a database that is designed for organizing, storing, and retrieving such data and information, and proactively distributes the data and information according to pre-defined instructions (e.g., alert users that a transaction has caused a negative cash balance to occur that is below a predefined minimum amount, and alert users again if the cash shortage has not been covered within a pre-defined time allowance)." Lewis Pub. No. US 2002/0065752 A1 ¶ [0035]); and

amalgamating at least one pair of queries from among said sequence of trading queries in order to enhance the efficiency of responding thereto ("The business objects have a third dimension that enhances information coherence and

comprehension. This is depicted in the schematic diagram of FIG. 10. As presented, data and information in the database have levels of abstraction from the raw incoming transactions to the accounting positions and balances that are derived therefrom, to consolidations of positions and balances by legal entity, customer, counterparty, currency, employee, and the like." Lewis Pub. No. US 2002/0065752 A1 ¶ [0095])

## **Conclusion**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Carey (2001/0049685 A1) shows a method for a computer-implemented technique for query optimization with deferred updates and autonomous sources. An object-oriented query is executed to retrieve data from a database. The database is stored on a data storage device connected to a computer. The object-oriented query is transformed into subqueries, wherein at least one subquery is directed against a database, and wherein one subquery is directed against an object cache. Each subquery that is directed against a database is executed to retrieve data from the database into the object cache. The subquery that is directed against the object cache is executed to retrieve data for the query, wherein the data incorporates updates to the object cache and updates to the database.

Hinkle (US 6442533 B1) shows a financial transaction processing system wherein substantial processing efficiencies are provided with a decrease in the size of the executable code. Each transaction processed by the system is described by a transaction data descriptor that includes a series of subtransaction data descriptions of actions that can be performed independently of one another. Thus transaction data descriptors are processed interpretatively. Moreover, the independence of the subtransactions allows the subtransactions of a transaction to be processed in parallel when performed on a multiprocessor computer. Additionally, the transaction processing system provides accountbalancing enhancements where there are control columns in various data tables that are automatically updated during transaction processing so that by comparing control column totals, an indication of the integrity of current financial records is provided. Additionally, the transaction processing system provides full auditability in that any changes to financial data can be traced for any effective period of time into the past so that auditors can periodically perform a full audit of the data retained by the transaction processing system.

Herz (US 6029195 A) shows an invention relating to customized electronic identification of desirable objects, such as news articles, in an electronic media environment, and in particular to a system that automatically constructs both a "target profile" for each target object in the electronic media based, for example, word frequency, as well as a "target profile interest summary" for each user, which describes the user's interest level in various types of target objects. The system then evaluates the target profiles against the users' target profile interest summaries to generate a user-customized rank ordered listing of target objects selected from the plethora of target objects profiled on the electronic media. Users' target profile interest summaries can be used to efficiently organize the distribution of information in a large-scale system consisting of many users interconnected by means of a communication network.

Shenoy (US 2002/0040304 A1) shows a method of creating and managing a capital asset transaction utilizing a field programmable transaction system, using a network including a server coupled to a centralized database and at least one client system. The method comprises identifying business objectives, defining a type of the capital asset involved in the capital asset transaction, creating a business entity and related sub-entities, defining business rules and logic specific to the business entity and the associated sub-entities to govern the transaction, and managing the transaction dynamically on an on-going basis to close the transaction successfully.

Carothers (2002/0069117 A1) shows a peer-to-peer electronic marketplace, systems and methods for conducting transactions therein. More particularly, the electronic marketplace includes member systems and a market administrator. The market administrator controls the membership to a market of goods/services. Member systems communicate directly with each other using mobile agents without having to go through the market administrator. The mobile agents not

only allow the users to remain anonymous, but also efficiently locate buyers and

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sellers of goods/services.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Gerald C. Vizvary whose telephone number is

571-270-3268. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Khoi Tran can be reached on 571-272-6919. The fax phone number

for the organization where this application or proceeding is assigned is 571-270-

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9199 (IN USA OR CANADA) or 571-272-1000.

Gerald Vizvary Patent Examiner, A.U. 3609 October 3, 2007

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